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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,510	01/21/2004	Hirokazu Honda	NECF 18.363A (100806-0024)	4217
26304	7590	05/25/2005	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			LE, THAO P	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8m

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/761,510		HONDA, HIROKAZU	
	<b>Examiner</b>		<b>Art Unit</b>	
	Thao P. Le		2818	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1 page</u> . | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION

**Response to Preliminary Amendment**

Preliminary Amendment filed on 01/21/04 has been entered.

In Preliminary Amendment, applicant cancels claims 1-7, and claim that this application is a Divisional of the application serial number 09/789,864, filed on February 21, 2001.

**Priority**

Acknowledge is made of applicants' claim for foreign priority base on an application 2000-043665 filed in Japan on 02/21/2000.

***Information Disclosure Statement***

Information Disclosure Statement (IDS) filed on **01/21/04** and made of record.  
The references cited on the PTOL 1449 form have been considered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 8, 10-11 are rejected under 35 USC 102 (e) as being anticipated by Kao et al., U.S. Patent No. 6,249,044.**

Regarding claim 8, Kao discloses a method of forming a flip chip type (See Figs. 3A-3E and depending portions of specification) comprising the steps of: forming a pad electrode 32 on a substrate 31, forming an insulating film 33 on the entire surface of the substrate and removing the insulating film on the pad electrode to form an opening, forming a metal thin film and patterning the metal thin film to form wiring portion 37, forming a resist film 35 and patterning the resist film and forming an electrode 37C in the opening, forming a metal bump 21 on the electrode, forming a support plate 22 above the substrate with an appropriate interval between the support plate and

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substrate, the support plate having a diameter larger than diameter of the metal bump and formed at positions adjusted to the positions where the metal bump are arranged, an insulating resin layer is inherently formed between the substrate and the support plate for attachment( layer 33 and 35 carry out the same function).

Regarding claim 10, Kao discloses the support plate is made of insulating material (prevent electrical conduction, col. 3) and conductive material is filled into the holes in the support plate.

Regarding claim 11, Kao discloses the support plate is arranged above the substrate by arranging jigs each having an appropriate thickness at both ends of the substrate.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kao et al., U.S. Patent No. 6,249,044.**

Regarding claim 9, Kao fails to disclose the support plate is made of conductive material, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use either conductive material or insulating material to form the support plate because the either materials would not affect the function of the support plate in the prevent invention.

When responding to the office action, Applicants' are advice to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao P. Le whose telephone number is 571-272-1785. The examiner can normally be reached on M-T (7-6).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thao', with a stylized flourish extending from the end.

Thao P. Le

Examiner

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